Geometry Name _____
Lesson 12: Properties of Triangles and Quadrilaterals
Math for Standards Date _____

The median goes from one _____ to the opposite _____.

Medians always stay _____ the figure.

An angle bisector will cut the angle in _____ (just like any other bisector).

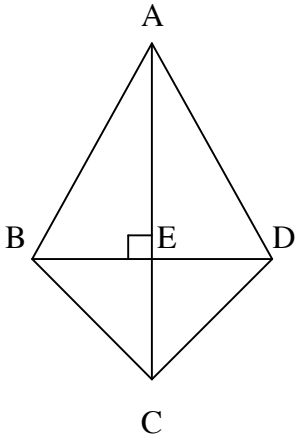
Each angle will have its own _____ that lies _____ the triangle.

An altitude will start at a _____ and be _____ to the opposite side.

| Figure | Properties |
|---|---|
| Parallelogram | |
| Rectangle | |
| Rhombus | |
| Square | |

A rectangle is also a _____, as is a rhombus. A _____ fits the qualities of a parallelogram, rectangle, and rhombus.

Example 1: For which triangles is segment AE an altitude? Which segments could be considered medians, and for what triangles?




Example 2: Refer to the table of quadrilaterals. For each description, list the quadrilaterals that are described by the given property.

a. A diagonal creates two congruent triangles.

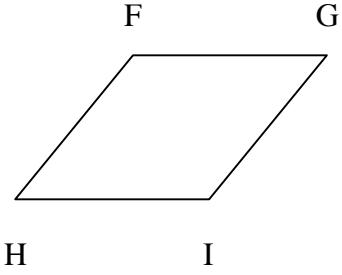
b. Diagonals bisect each other.

c. Diagonals are congruent.

d. Diagonals are perpendicular to each other.

e. Diagonals bisect the angles of the quadrilateral.

Example 3: FGHI is a rhombus. Find the measure of each angle.




$m\angle HFG = (9x + 7)°$
$m\angle FGI = (4y + 37)°$
$m\angle GIH = (7x + 31)°$
$m\angle IHF = (8y + 9)°$